

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of **WEAVER**  
Serial No.: 09/888,247  
Group: 2153  
Examiner: Klinger, Scott M.  
Date Filed: June 22, 2001  
Docket No.: 6169-190  
IBM Docket No.: BOC9-2000-0055

Confirmation No.: 8739

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JAN 20 2006

## DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, J. Mark Weaver, a citizen of the United States of America, residing at [REDACTED]  
[REDACTED] Austin, TX [REDACTED] hereby declare and state as follows:

1. I was employed by International Business Machines Corporation (IBM) in Armonk, New York at the time the above-identified application was conceived. I make this declaration in support the above-identified application.
2. IBM had invested substantial time and effort into the research, development, and marketing of their products, and in an effort to protect its rights in all new inventions, IBM requests that all employees prepare and submit confidential Invention Disclosure Forms upon conception by the inventor(s).
3. As the named inventor for this invention, I submitted the attached IBM Confidential Invention Disclosure BOC8-2000-0046 for consideration to an IBM Attorney / Patent Professional for preparation of a patent application on April 28, 2000. The content of the disclosure has not been subsequently modified.
4. The Confidential Invention Disclosure represents a fully conceived and workable invention as written. I reviewed the claims of the above-mentioned patent application prior to submission of the application to assure the claimed invention was fully supported by the disclosure in light of the invention disclosure and art known at the time of the disclosure.

Declaration Under 37 C.F.R. §1.131  
U.S. Patent Appln. No. 09/888,247  
Docket No. 6169-190

5. I diligently worked with outside counsel throughout the year of 2001 to prepare and file the above-mentioned patent application.

6. I make this Declaration to establish that I conceived of the present invention at least as early as April 28, 2000, and exercised due diligence from prior to April 28, 2000 through June 22, 2001, the filing date for the above-identified patent application.

7. I further declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the above-identified patent application or any patent issuing thereon.


J. Mark Weaver  
J. Mark Weaver

Date: 12/21/2004

STATE OF TEXAS )  
COUNTY OF \_\_\_\_\_ )

The foregoing instrument was sworn to and subscribed before me this \_\_\_\_ day of \_\_\_\_\_, 2004, by J. MARK WEAVER, who is personally known to me or who has produced \_\_\_\_\_ (type of identification) as identification.

\_\_\_\_\_  
NOTARY PUBLIC, STATE OF TEXAS  
(Print, Type or Stamp Commissioned Name of Notary Public)

	<b>Disclosure BOC8-2000-0046</b>
	Created By: Mark Weaver Created On: 04/27/2000 12:04:34 PM
	Last Modified By: Elaine Venturelli Last Modified On: 06/09/2000 12:23:44 PM
*** IBM Confidential ***	

Required fields are marked with the asterisk (\*) and must be filled in to complete the form.

### Summary

Status	Submitted
Processing Location	BOC
Functional Area	Telecommunications & Media
Attorney/Patent Professional	Richard Tomlin/Boca Raton/IBM
IDT Team	<del>XXXXXXXXXXXXXXXXXXXX</del>
Submitted Date	04/28/2000 03:38:03 PM
Owning Division	SWG
	To calculate a PVT score, use the 'Calculate PVT' button.
Incentive Program	
Lab	
Technology Code	

### Inventors with Lotus Notes IDs

Inventors: Mark Weaver/Austin/IBM

Inventor Name > denotes primary contact	Inventor Serial	Div/Dept	Manager Serial	Manager Name
Weaver, J.M. (Mark)	<del>XXXXXX</del>	<del>XXXXXX</del>	<del>XXXXXX</del>	<del>XXXXXXXXXXXXXXXXXXXX</del>

### Inventors without Lotus Notes IDs

### IDT Selection

IDT Team: <del>XXXXXXXXXXXXXXXXXXXX</del>	Attorney/Patent Professional: Richard Tomlin/Boca Raton/IBM
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### Main Idea

#### \*Title of disclosure (in English)

Low Cost Monitor & Alert Application for Global Merchant Service

#### \*Idea of disclosure

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of using the invention.

This disclosure describes a software application monitoring tool that provides a simple but effective method for empirically validating the on-going availability of system functions for the Global Merchant Service. The current IBM Global Merchant Service does not detect failures or delays in the 'verification and clearing' of financial transactions outside of the Global Merchant Service operations center. These external failures or delays include the Merchant's web hosting service, Merchant's ISP, CSP's ISP, IBM's ISP, and Credit Card Clearing services. Although these types of failures and delays are outside of the conventional control of the operation center, knowing about these impacts allows the Global Merchant

BOC8-2000-0046 Low Cost Monitoring Alert Application for Global Merchant Service - Continued

Service support team to pro-actively assist in problem resolution thus having a significant impact to the overall customer satisfaction level with the Global Merchant Service.

2. How does the invention solve the problem or achieve an advantage, (a description of "the invention", including figures inline as appropriate)?

The software is built from new and 'off the shelf' components. The new components include: Dispatcher, Collector, Logger, Monitor, and Alerter. See figure 1. The 'off the shelf' components include any commonly available personal computer & operating system with a Java Virtual Machine, connected to the Internet.

The Dispatcher is a Java applet / application that reads a list of predetermined merchant URLs from an existing database, and sequentially submits a placebo transactions (as if it were a purchases transaction) to each through the Internet. The Dispatcher accepts the following methods (from the monitor component): Start, Stop, Set Interval. The dispatched Merchant URL, unique sequence number, and time is placed in a transaction log by the Logger component.

The Collector is a Java applet / application that accepts the response messages of the placebo transactions from each respective merchant web site. The Collector accepts the following methods: Receive Message. The arrival time of the response is logged for the given merchant URL and sequence number.

The Logger is a Java applet / application that accepts messages from the Monitor, Dispatcher, and Collector. The Logger accepts the following methods: Set\_Sample\_Size, Log\_Dispatched, Log\_Response, Purge\_Log, Purge\_Current\_Status, Read\_Status. The Logger maintains a two dimensional Current\_Status array of entries, indexed by Merchant URL and by Sample size, with each element of the array to include (a) an indication that a given Dispatched has received a response and (b) the dispatched time minus the response time. The Log\_Dispatched method writes a sequential entry for each outbound transaction from the Dispatcher and to the Current\_Status array. The Log\_Response writes the response time from the Collector for previously logged entries by the Dispatcher and to the Current\_Status array. Sequential entries are stored for each Merchant URL up to the Sample\_Size. Subsequent Log\_Dispatched entries replace the oldest entries in the array for that Merchant URL. The Read\_Status method returns the total number of entries for a given Merchant URL (up to Sample Size), the number of unanswered outstanding requests, the minimum, the maximum, and average response times for a requested merchant URL.

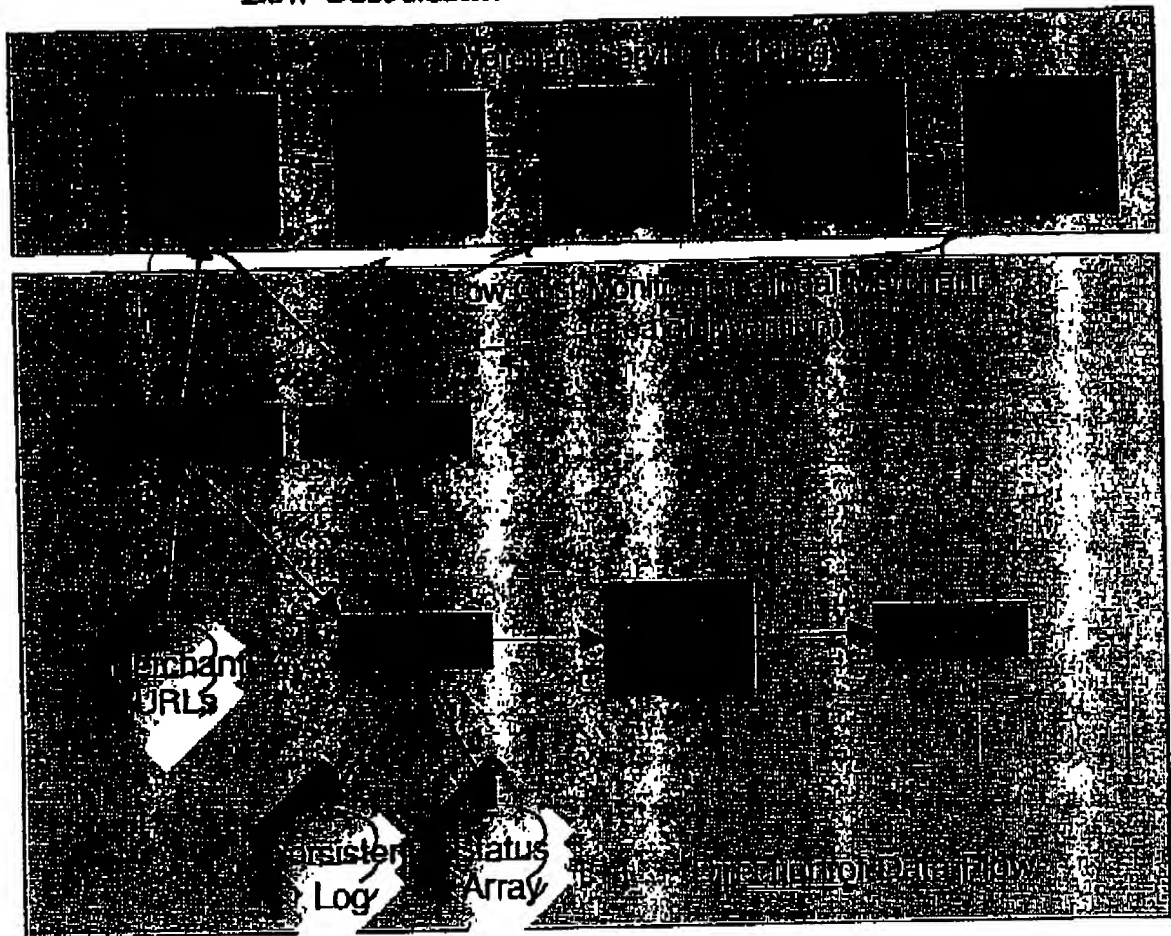
The Monitor is a Java application / applet that periodically issues a Request\_Status to the Logger with the Request\_Status method. The Monitor method accepts the following methods: Set\_Alert\_Average\_Timeout\_Threshold, and Set\_Alert\_Outstanding\_Threshold. The monitor applet provides a graphical summary list of merchant URLs with the corresponding minimum, average, maximum response times for each. If any given Merchant URL exceeds the Set\_Alert\_Average\_Timeout\_Threshold or the Set\_Alert\_Outstanding\_Threshold then an Alert is posted to the Alert applet.

The Alert application / applet class either sounds an auditable alert to the system console or radio-pager telephone number.

The Global Merchant Service procedures are modified to emulate a Credit Card Clearing transaction with a floating average response time of the most recent Credit Card Clearing transaction.

BOC8-2000-0046 Low Cost Monitor & Alert Application for Global Merchant Service - continued

### Data Flow Diagram for Low Cost Monitor for Global Merchant



4/27/2000

## Figur

Existing monitoring methods in the Global Merchant Service do not include the response and availability of the entire transaction processes as perceived by the Global Merchant customer. This leaves failures or delays in Merchants website, Merchants ISP, Merchant's CSP, IBM's ISP, and IBM's Credit Card Clearing undetected and not measured. The proposed invention measures and monitors the entire process as perceived by the customer.

January 2, 2001

pg. 2 of 3

[REDACTED]

60169-190 Life Patent Appen by 01/02/01  
in process

3AN/smg

[REDACTED]

March 2 2006

Pg 2 of 3

16169-190 file Patent Appn by 04/02/01 - OK gml/smg



April 2, 2007

Pg. 2 of 5

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✓ 669-190 File Patent Appln by today

10 month  
in progress

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May 2, 2001

✓ 6/69

190

Preparing No Patents In Process

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## h Prozess

1 month

June 2, 2001

6/16/9 - Prepare & File Patents GAN/smc

-190-

120 month



1798 NW 40th Street  
Boca Raton, FL 33431

October 2, 2000

Ackerman, Senterfitt & Eidson, P.A.  
222 Lakeview Avenue  
Fourth Floor  
Post Office 3188  
West Palm Beach, FL 33402-3188

Dear Steve,

Please prepare and file the cases listed below with the U. S. Patent and Trademark Office. A copy of the invention disclosure is enclosed for your use in preparing the application in accordance with IBM's format.

Invention Disclosure: BOC8-2000-0046  
Title: LOW COST MONITOR & ALERT APPLICATION FOR GLOBAL MERCHANT SERVICE  
IBM Docket: BOC9-2000-0055

6169-190

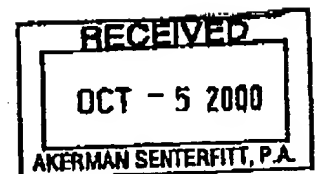
Thank you for your assistance in this matter.

Sincerely,

*Richard A. Tomlin*

Richard A. Tomlin  
Consulting Attorney

Enclosures



# AKERMAN SENTERFITT

ATTORNEYS AT LAW

222 LAKEVIEW AVENUE, SUITE 400

WEST PALM BEACH, FLORIDA 33401

PHONE (561) 653-5000 • FAX (561) 653-5333

<http://www.akerman.com>

21/02/01 } Reminders  
23/02/01 }  
9/02/01 - File Patent Appln. today

October 11, 2000

Richard A. Tomlin, Esq.  
IBM Corporation  
1798 NW 40th Street  
Internal Zip 2106  
Boca Raton, FL 33431

Re: New Patent Application  
LOW COST MONITOR & ALERT APPLICATION FOR GLOBAL  
MERCHANT SERVICE  
IBM Docket No. BOC9-2000-0055; Our Docket No. 6169-190

Dear Dick:

Thank you for your letter dated October 2, 2000. In accordance with your instructions, a patent application will be filed in the above-referenced matter on or before April 2, 2001. Notwithstanding, we will strive to prepare the patent application in an expedient manner.

As always, thank you for allowing us to be of assistance to you.

Very truly yours,

AKERMAN SENTERFITT.



Steven M. Greenberg

SMG/kmw

cc: Gregory A. Nelson, Esq.

P1000807.WPD

AKERMAN, SENTERFITT & EIDSON, P.A.

# AKERMAN SENTERFITT

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222 LAKEVIEW AVENUE, SUITE 400  
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May 11, 2001

**VIA FACSIMILE** [REDACTED]

Mr. Mark Weaver  
IBM Corporation  
11400 Burnet Road  
Bldg. 901/MS9121  
Austin, TX 78758

Re: **New Patent Application**  
**MONITORING TOOL**  
**IBM Docket No. BOC9-2000-0055; Our Ref: 6169-190**

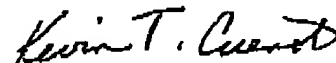
Dear Mark:

Enclosed please find a draft of a patent application for the above identified matter. Please review it carefully to ensure that the description of the invention accurately recites all of the invention's characteristics in the broadest possible manner, while also explaining, in detail, the preferred embodiment of the invention. The drawings should also be reviewed to confirm that they accurately depict the various details of the invention as you understand them. Finally, please read through the numbered claims at the end of the application. The claims will define the scope of protection any patent issuing from this application will provide. Accordingly, you should review them to ensure that they do not unduly restrict the scope of the invention by including any unnecessary detail. After you have reviewed the application, please call me with any comments you may have.

Please recall that patent applicants have a duty to disclose to the United States Patent Office all reasonably pertinent prior art of which they are aware. Failure to do so can jeopardize the validity of any patent issuing from an application. Accordingly, should you become aware of such references at any time during the pendency of this application, please let us know.

Very truly yours,

AKERMAN SENTERFITT



Kevin T. Cuenot

KTC/djt  
Enclosures

P1012949;1

AKERMAN, SENTERFITT & EIDSON, P.A.

\*\* TX STATUS REPORT \*\*

AS OF MAY 11 2001 15:00 PAGE.03

AKERMAN SENTERFITT

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03	05/11	15:54	NCSD - DEVELOPMENT	LF--S	05'23"	024	202	OK

**AKERMAN SENTERFITT**

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May 11, 2001

VIA FACSIMILE

Mr. Mark Weaver  
IBM Corporation  
11400 Burnet Road  
Bldg. 901/MS9121  
Austin, TX 78758

Re: New Patent Application  
MONITORING TOOL  
IBM Pocket No. BOC9-2000-0055; Our Ref: 6169-190

Dear Mark:

Enclosed please find a draft of a patent application for the above identified matter. Please review it carefully to ensure that the description of the invention accurately recites all of the invention's characteristics in the broadest possible manner, while also explaining, in detail, the preferred embodiment of the invention. The drawings should also be reviewed to confirm that they accurately depict the various details of the invention as you understand them. Finally, please read through the numbered claims at the end of the application. The claims will define the scope of protection any patent issuing from this application will provide. Accordingly, you should review them to ensure that they do not unduly restrict the scope of the invention by including any unnecessary detail. After you have reviewed the application, please call me with any comments you may have.

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Very truly yours,

AKERMAN SENTERFITT

*Kevin T. Cuenot*

Kevin T. Cuenot

KTC/djt  
Enclosures

01012949:1

AKERMAN, SENTERFITT &amp; EIDSON, P.A.

MEMPHIS • MIAMI • ORLANDO • TALLAHASSEE • TAMPA

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<http://www.akerman.com>

June 21, 2001

**Via Facsimile** 

Mr. Mark Weaver  
11012 Crossland Drive  
Austin, TX 78726-1318

Re: Patent Application for  
MONITORING TOOL  
IBM Docket No. BOC9-2000-0055; Our Ref: 6169-190

Dear Mark:

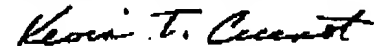
Enclosed please find a final draft of a patent application referenced above along with formal documents for execution. Please review the revised application and if acceptable to you, kindly execute the "Declaration for Patent Application", "Assignment", and "Oath and Assignment". Please return the aforementioned documents to me via facsimile at 561-653-5333 along with mailing the originals to the address listed above.

Please note that a patent applicant has a duty to disclose to the United States Patent Office all reasonably pertinent prior art that is known by you. Failure to do so can jeopardize the validity of any patent issuing from an application. Accordingly, should you become aware of such references at any time during the pendency of this application, please let us know.

Should you have any questions, or wish to discuss this application further, please do not hesitate to call.

Very truly yours,

AKERMAN SENTERFITT



Kevin T. Cuenot

KTC/djt  
Enclosure

P1015738;1

AKERMAN, SENTERFITT &amp; EIDSON, P.A.



\*\* TX STATUS REPORT \*\*

AS OF JUN 21 2001 15:37 PAGE.01

AKERMAN SENTERFITT

	DATE	TIME	TO/FROM	MODE	MIN/SEC	PGS	JOB#	STATUS
21	06/21	15:24	661 495 1845	G3-S	13'12"	029	062	OK

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NAME: Mark Weaver	CLIENT/MATTER NO: 6169-190
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COMPANY NAME: IBM Corp.	

SENDER'S NAME: Deedra Thompson per Kevin T. Cuenca

Re: MONITORING TOOL  
 IBM Docket: BOC9-2000-0055 Our Docket: 6169-190

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